2.0 ORGANIZATION OF OSMP AREAS

The study area, the open space covered by this management plan, has been hierarchically subdivided to facilitate organization and discussion of issues relative to the areas in which they are most applicable. The OSMP study area (Figure 2-1) includes existing open space, proposed open space, and standards areas (a significant portion of which will become future open space based on specific development and conservation standards).

2.1 Management Units

The open space areas shown in Figure 2-1 have been subdivided into Management Units based on the aggregation of remaining open space within the City and/or natural biogeographic boundaries (Figure 2-2). The management units are defined by grouping of semi-contiguous areas that would be most effectively managed if treated as a single unit. The subdivisions were created by grouping the parcels around lagoons and lagoon margin habitat (Buena Vista, Agua Hedionda, and Batiquitos Management Units), and by grouping larger contiguous blocks of upland habitat with other smaller nearby open space areas resulting in the creation of eight more management units capturing the canyon networks throughout the remainder of the City (Arroyo La Costa, Bressi/Carrillo, Buena Vista Creek, Calavera, Faraday, Los Monos, Poinsettia/Aviara, and Rancho La Costa Management Units.). Note that parcels were not split between management units. Table 2-1 shows the acreages of each habitat type in each management unit. Note that all calculations of vegetation acreages are based on the MHCP vegetation database maintained by SANDAG.

2.2 Subunits

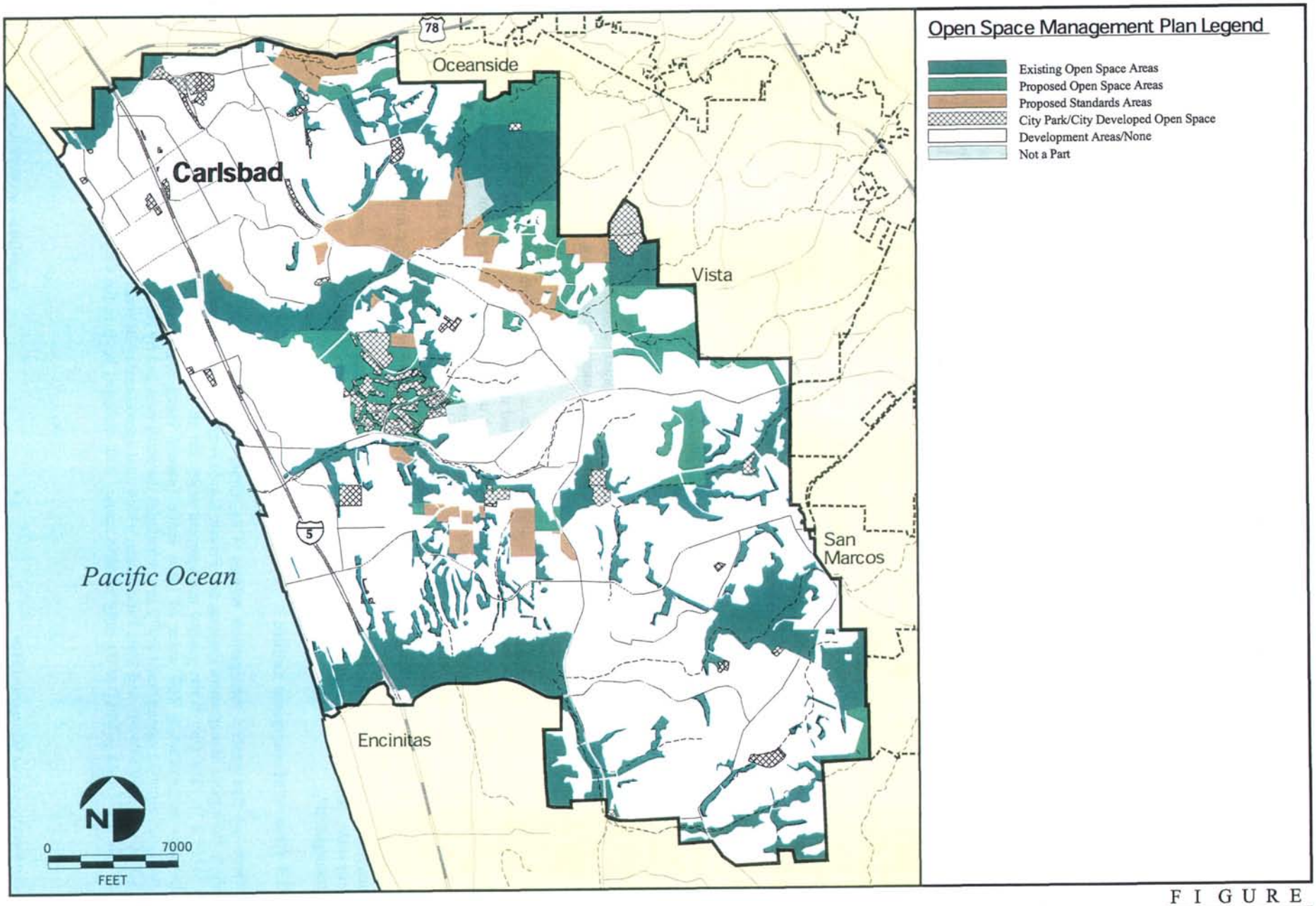
Management units were then further subdivided into Subunits based on ownership and current (or presumed future) management entity (see below). Multiple parcels that are under the stewardship of one management entity were included in the same subunit if they were in the same management unit and semi-contiguous (connected or near enough to each other to be effectively managed as a unit). There are 57 subunits within the OSMP (Figure 2-3). Some management units contain a small number of subunits (e.g., Bataquitos Lagoon M.U.), while other management units contain many subunits (e.g., Poinsettia/Aviara M.U.).

The purpose of subdividing the OSMP into management units is to identify cohesive units with similar management issues that would be best managed in a coordinated way. The purpose of further subdividing the management units into subunits is to recognize the diverse ownerships and management entities that have or may in the future have different preserve managers, management funding sources, and that will need to coordinate among themselves within a management unit. The Carlsbad OSMP Implementation Process and Structure specifies the mechanisms for coordination of these units.

Management entities are the organizations (public or private) that are responsible for maintaining and managing the open space values on the lands addressed by the OSMP. While the City of Carlsbad, to maintain compliance with the HMP and MHCP has the ultimate responsibility for open space management citywide, numerous other management entities have the day-to-day, on-the-ground responsibility for management.

2.3 General Management Entities

There are five general management entities (City, Other Public/Semi-Public, Wildlife Agencies, Third Party Biological Management Entities, and Private Land Owners) for open space management in Carlsbad (Table 2-2). The City is the general management entity for all lands that it owns in the OSMP, which includes approximately 600 acres of open space (natural areas plus developed parks). The other public/semi-public management entity group includes the areas managed by North County Transit District, SDG&E, Cabrillo Power, and State Parks lands, which total approximate 420 acres. California Department of Fish and Game (CDFG) is the only wildlife agency with managed lands in the City. CDFG manages



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Areas Included in the OSMP

FIGURE

2-1

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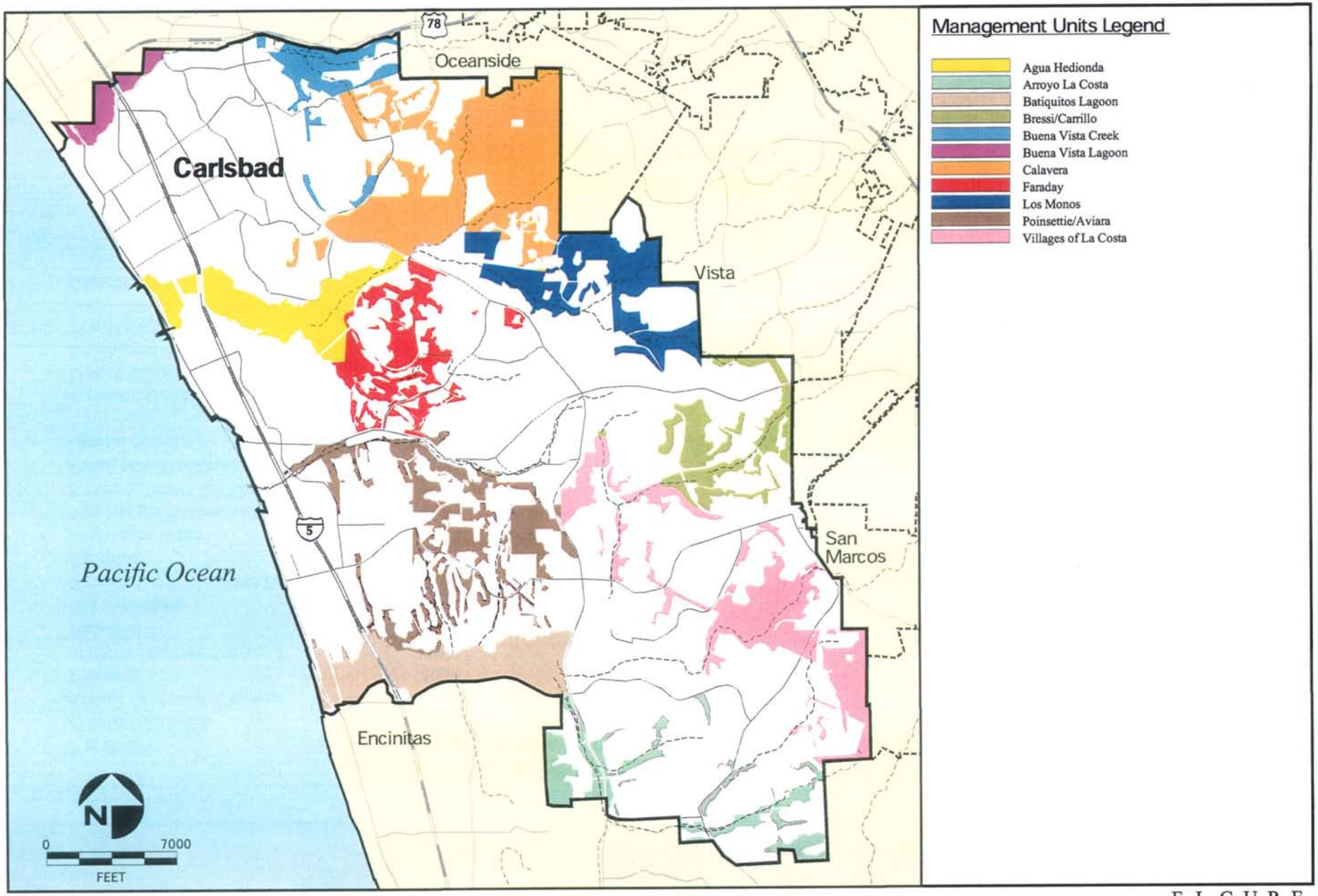

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Management Units in the OSMP

FIGURE

2-2

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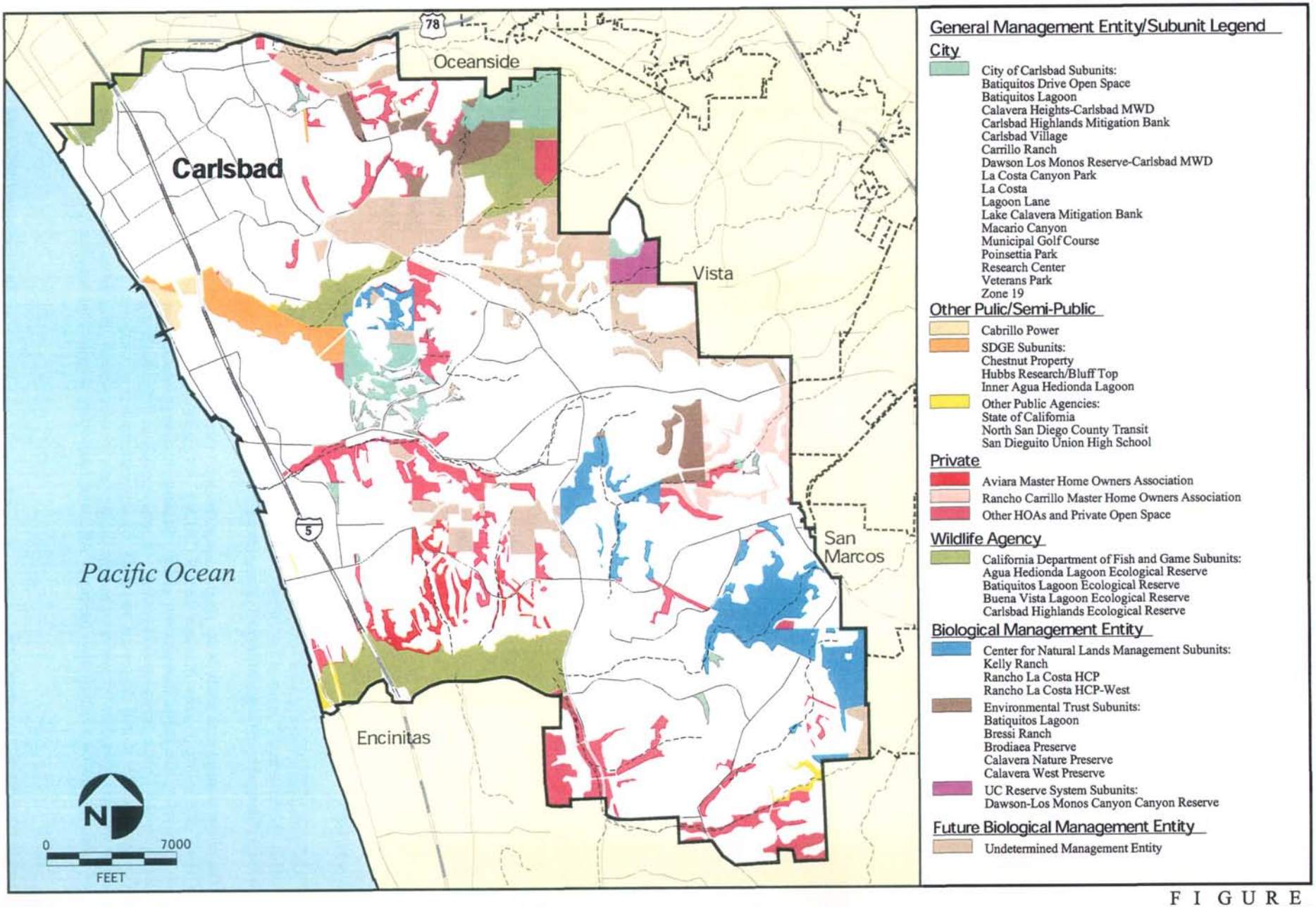
TABLE 2-1.
ACRES OF VEGETATION OCCURRING WITHIN EACH MANAGEMENT UNIT

Vegetation	Agua Hedionda	Arroyo La Costa	Batiquitos Lagoon	Bressi/ Carrillo	Buena Vista Creek	Buena Vista Lagoon	Calavera	Faraday	Los Monos	Poinsettia/ Aviara	Villages of La Costa	Grand Total
Coastal Sage Scrub	56.2	43.2	28.6	137.9	30.6	--	616.4	178.3	135.5	210.1	560.0	1,996.7
Coastal Sage Scrub/Chaparral	--	--	--	--	--	--	13.7	26.0	73.3	--	--	113.0
Chaparral	--	30.7	--	38.2	9.8	--	173.4	44.0	89.3	105.7	132.5	623.5
Southern Maritime Chaparral	--	139.9	--	--	--	--	--	25.4	6.3	128.7	80.8	381.1
Grassland	19.4	96.9	--	58.1	109.8	--	186.2	110.7	70.1	30.8	76.6	758.7
Oak Woodlands	--	--	--	3.3	--	--	11.3	--	2.6	8.9	0.4	26.4
Riparian Scrub/Woodland/Forest	67.0	75.8	17.6	27.2	70.5	--	41.7	37.7	99.7	13.5	43.6	494.4
Estuarine	263.7	--	430.6	--	--	76.9	--	--	--	--	--	771.2
Fresh Open Water	--	--	--	--	0.3	35.8	15.4	--	--	--	1.0	52.4
Meadow and Freshwater Marsh	49.0	19.0	73.9	4.4	27.8	20.8	32.3	11.4	7.7	30.8	11.2	288.2
Southern Coastal Salt Marsh	93.7	--	43.5	--	--	--	--	0.2		--	--	137.5
Eucalyptus Woodland	0.3	0.6	23.0	--	--	--	8.6	2.1	3.5	55.8	11.4	105.3
Natural Habitats	*549.3*	*406.1*	*617.2*	*269.2*	*248.7*	*133.4*	*1,098.9*	*435.9*	*487.9*	*584.3*	*917.7*	*5,748.7*
Agricultural Land	2.7	18.4	1.4	107.6	--	--	318.2	29.9	142.2	77.8	1.0	699.2
Disturbed Habitat	14.3	17.8	40.6	45.6	14.9	5.2	61.9	7.4	31.6	36.0	41.5	316.7
Developed/Urban	7.2	45.1	10.5	28.6	22.8	0.7	81.6	21.1	15.5	121.2	16.3	370.6
Non-Habitat	*24.3*	*81.3*	*52.5*	*181.9*	*37.7*	*5.9*	*461.7*	*58.3*	*189.2*	*234.9*	*58.8*	*1,386.5*
Grand Total	573.6	487.3	669.7	451.1	286.5	139.3	1,560.6	494.2	677.1	819.2	976.4	7,135.1



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General Management Entity and Associated Subunits in the OSMP

FIGURE 2-3

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1,254 acres in the City (most of all three lagoons plus the Carlsbad Highlands Ecological Reserve). Third party biological management entities (including the Center for Natural Lands Management (CNLM), the Environmental Trust (TET), and the U.C. Reserve System) manage 1,413 acres of open space currently, and will eventually manage much of the 1,054 acres currently identified in the standards areas. Third party biological management entities are private, nonprofit organizations with specific expertise in the maintenance, management, and monitoring of natural open space. They are typically funded through large endowments that are established along with the establishment of the preserve areas they manage. The remaining open space (over 2,000 acres) is in private ownership of homeowners associations or other private parties, but is conserved in perpetuity by existing conservation easements, open space easements, or other similar land use agreements. While this land is dedicated to remain in open space, there are no current obligations to actively manage these areas for biological value.

TABLE 2-2.
ACRES OF VEGETATION MANAGED BY EACH GENERAL MANAGEMENT ENTITY

Vegetation	City	Other Public/ Semi-Public	Wildlife Agency	Biological Management Entity	Future Biological Management Entity*	Private/ HOA	Total
Coastal Sage Scrub	167.6	58.7	203.9	706.5	408.3	451.7	1,996.7
Coastal Sage Scrub/Chaparral	13.7	--	--	24.4	66.5	8.5	113.0
Chaparral	118.7	--	19.8	224.8	71.8	188.5	623.5
Southern Maritime Chaparral	9.1	--	--	92.7	79.9	199.4	381.1
Grassland	111.8	24.9	52.6	101.5	232.6	235.2	758.7
Oak Woodlands	1.2	--	6.7	0.4	14.8	3.3	26.4
Riparian Scrub/Woodland/Forest	52.0	6.0	86.3	74.6	159.5	116.1	494.4
Eucalyptus Woodland	2.3	--	23.1	12.8	7.5	59.6	105.3
Estuarine	--	265.1	504.4	--	1.3	0.4	771.2
Meadow and Freshwater Marsh	22.2	16.3	133.2	11.6	44.7	60.2	288.2
Southern Coastal Salt Marsh		19.5	116.1	0.4	--	1.4	137.5
Fresh Open Water	14.9		35.8	1.0	0.7	--	52.4
Natural Habitats	*513.4*	*390.5*	*1,181.7*	*1,250.7*	*1,087.7*	*1,324.4*	*5,748.4*
Agricultural Land	26.9	2.6	30.4	102.1	502.0	35.2	699.2
Disturbed Habitat	44.5	10.4	38.2	44.5	85.9	93.2	316.7
Developed/Urban	18.6	16.8	3.3	15.3	56.0	260.4	370.6
Non-Habitat	*90.0*	*29.8*	*71.9*	*161.9*	*643.9*	*388.8*	*1,386.5*
Grand Total	603.6	420.4	1,253.6	1,412.6	1,731.7	1,713.3	7,135.1

*Future biological management entity(ies) will be identified to manage the future preserve areas established within the "standards" areas of the OSMP. These acres represent the total standards areas. The acres that will be managed by a future biological management entity will be less than shown here.

The prime management entity is the single largest (or only) management entity for a subunit (e.g., the City, CDFG, or a private preserve manager such as CNLM). All major open space management activities will be coordinated by the prime management entity. Secondary management entities are organizations that are responsible for some management activities on some parcels in the subunit (e.g., the Buena Vista Lagoon Foundation). There may be several secondary management entities in a subunit. The prime management entity will be responsible for preparing and updating preserve management plans for each subunit (or group of subunits) and for implementing the plan. All major open space management activities will be covered

by the plan including but not limited to restoration projects, species monitoring, fence and trail maintenance. The secondary management entity may sponsor a minor open space management activity such as a trash pick up day, or the installation of an interpretive sign. All management activities (major and minor) will be consistent with the preserve management plan and coordinated with the prime management entity. The Carlsbad OSMP Implementation Process and Structure specifies the mechanisms for coordination of the different management entities. All management entities will be required to participate.

2.4 Levels of Open Space/Preserve Management and Monitoring

Open space management (including monitoring) has many different components and occurs at many different levels depending on a number of factors including ownership, open space management funding, and intended purpose and uses of the open space. Four levels of open space management have been defined here to facilitate the discussion in this report, property management, preserve management, species monitoring and management, and regional (subregional) monitoring.

2.4.1 Property Management

Property management is the most basic level of open space management and is focused primarily on establishing and maintaining the property boundary barriers including fencing, gates, and signage. Trash collection is often, but not always an action on property-level managed open space. The MHCP includes property management activities in what it describes as "preserve area monitoring".

2.4.2 Preserve Management

Preserve management includes all the property-level management actions, but also focuses on management to protect the natural open space character of the area and to provide opportunities for recreational uses. Preserve management includes but is not limited to general management of trails, public use facilities, control of erosion or invasive species, and occasionally restoration. The MHCP also includes preserve management activities in what it describes as "preserve area monitoring".

2.4.3 Species Monitoring and Management

Species monitoring and management includes all of the property-level and preserve-level management actions, but also includes many species-specific (and habitat-specific) monitoring and management actions. Many of these species or habitat specific management activities are the ASMDs developed and applied through preserve management plans. Species monitoring and management includes but is not limited to species-specific surveys and habitat enhancement, often in coordination with or required by the resource agencies under existing mitigation agreements and as are required in the conditions for coverage established by the HMP/MHCP. While some aspects of preserve-level management can occur within the adaptive management context, all aspects of species monitoring and management will occur as adaptive management. The MHCP also includes species monitoring and management activities in what it describes as "preserve area monitoring".

2.4.4 Regional Monitoring

Regional monitoring is primarily focused on the collection and evaluation of trends in data across the MHCP subregion and throughout southern California as a whole. Regional monitoring includes the maintenance of updated GIS data on vegetation type, species point data, and preserve management status (which areas are managed, at what level, and by whom). But most importantly, regional monitoring involves the synthesis of species and habitat data across the entire region (or subregion) that has been collected by consistent standardized methods and protocols so that meaningful evaluations of species and habitat status and trends can be conducted. While data collection will be the responsibility of the City and its preserve managers, the synthesis, evaluation, and interpretation of regional monitoring data will be accomplished by the state and federal resource agencies (i.e., CDFG, USFWS, and USGS). The MHCP includes regional monitoring activities in what it describes as "subregion and ecoregion monitoring".

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